

material composed of two or more layers, the first lap having a weldable polymer layer lying against the second lap, and the second lap having a weldable layer lying against the first lap, said first lap and said second lap each having predetermined weld lines, said process comprising:

pressing first areas of said laps together, by first contact area structures of two heated sealing heads, the two heat sealing heads including a first heated sealing head and a second heated sealing head, said first contact area structures corresponding to the predetermined weld lines;

advancing the pack material to bring said first area of said laps to second contact area structures of said two cooperating heated sealing heads, said second contact area structures corresponding to the predetermined weld lines;

pressing said first areas of said laps together by said second contact area structures, wherein said weldable polymer layer has a melting point of about 138°C and said first heated sealing head has a temperature of about 169°C, and wherein said first heated sealing head and said second heated sealing head cooperate by being pressed against one another, the temperature of said first heated sealing head being set above the melting temperature of the weldable polymer in said laps, and the temperature of said second heated sealing head being set below the melting temperature of the weldable polymer in said laps, to produce a temperature above the melting point of the weldable polymer in said laps.

15. (Currently Amended) ~~The process according to claim 14~~ Process for producing hot-seal packs for transdermal therapeutic systems, by transporting, in a predetermined

cycle through a sealing unit, two laps, a first lap and a second lap, of continuous pack material composed of two or more layers, the first lap having a weldable polymer layer lying against the second lap, and the second lap having a weldable layer lying against the first lap, said first lap and said second lap each having predetermined weld lines, said process comprising:

pressing first areas of said laps together, by first contact area structures of two heated sealing heads, the two heat sealing heads including a first heated sealing head and a second heated sealing head, said first contact area structures corresponding to the predetermined weld lines;

advancing the pack material to bring said first area of said laps to second contact area structures of said two cooperating heated sealing heads, said second contact area structures corresponding to the predetermined weld lines;

pressing said first areas of said laps together by said second contact area structures, wherein said weldable polymer layer has a melting point of about 138°C and said first heated sealing head has a temperature of about 169°C, and wherein said first heated sealing head and said second heated sealing head cooperate by being pressed against one another, the temperature of said first heated sealing head being set above the melting temperature of the weldable polymer in said laps, and the temperature of said second heated sealing head being set below the melting temperature of the weldable polymer in said laps, to produce a temperature above the melting point of the weldable polymer in said laps, wherein said second heated sealing head has a temperature of about 65°C.

16. (Previously Presented) The process according to claim 15, wherein said weldable polymer layer comprises high density polyethylene.

17. (Canceled)

18. (Currently Amended) ~~The process according to claim 17~~ Process for producing hot-seal packs for transdermal therapeutic systems, by transporting, in a predetermined cycle through a sealing unit, two laps, a first lap and a second lap, of continuous pack material composed of two or more layers, the first lap having a weldable polymer layer lying against the second lap, and the second lap having a weldable layer lying against the first lap, said first lap and said second lap each having predetermined weld lines, said process comprising:

pressing first areas of said laps together, by first contact area structures of two heated sealing heads, the two heat sealing heads including a first heated sealing head and a second heated sealing head, said first contact area structures corresponding to the predetermined weld lines;

advancing the pack material to bring said first area of said laps to second contact area structures of said two cooperating heated sealing heads, said second contact area structures corresponding to the predetermined weld lines;

pressing said first areas of said laps together by said second contact area structures, wherein said weldable polymer layer has a melting point of about 177°C and said first heated sealing head has a temperature of about 200°C and said second heated sealing head has a temperature of 80°C, and wherein said first heated sealing head and said second heated sealing head cooperate by being pressed against one another, the

temperature of said first heated sealing head being set above the melting temperature of the weldable polymer in said laps, and the temperature of said second heated sealing head being set below the melting temperature of the weldable polymer in said laps, to produce a temperature above the melting point of the weldable polymer in said laps.

19. (Previously Presented) The process according to claim 18, wherein said weldable polymer layer comprises polyacrylonitrile.